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Architectural Visualization: From Ancient Civilizations to the Roman Empire

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Abstract: Architectural visualization has been practiced for as long as there have been buildings. Visualization (lat.: visibilis "visible") generally refers to bringing abstract data and relationships into a graphically, visually comprehensible form. Particularly, visualization refers to the process of translating relationships that are difficult to formulate linguistically or logically into visual media (e.g., drawings or models) to make them comprehensible. Building owners have always been interested in knowing how their building will look before it is built. In the empirical part of this study, the roots of architectural visualization are examined, starting from the ancient civilizations to the end of the Roman Empire. Extensive literature research on architectural theory and architectural history forms the basis for this analysis. The focus of the analysis is basic research from the emergence of the first two-dimensional drawings in the Neolithic period to the triggers of significant further developments of architectural representation, as well as their importance for subsequent methods and the transmission of knowledge over the following epochs. The analysis focuses on the development of analog methods of representation from the first Neolithic house floor plans to the Greek detailed stone models and paper drawings in the Roman Empire. In particular, the question of socio-cultural, socio-political, and economic changes as possible triggers for the development of representational media and methods will be analyzed. The study has shown that the development of visual building representation has been driven by scientific, technological, and social developments since the emergence of the first civilizations more than 6000 years ago first by the change in human's subsistence strategy, from food appropriation by hunting and gathering to food production by agriculture and livestock, and the sedentary lifestyle required for this.

Keywords: ancient Greece, ancient orient, Roman Empire, architectural visualization

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